

## Patent Abstracts of Japan

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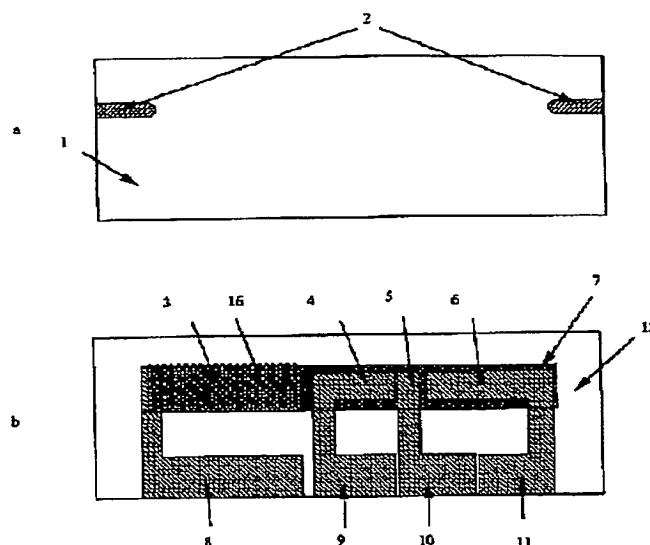
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TITLE : MINUTE-QUANTITY ON-LIFE  
 BIOSENSOR AND ITS MANUFACTURE



ABSTRACT : PROBLEM TO BE SOLVED: To remove electrochemically active material which becomes an obstacle at the time of electrochemical detection, by forming many minute projections on an upstream part of a working electrode in a passage.

SOLUTION: In this sensor, a substrate 1 on which two minute passage 2 are formed by a micro-machine technology, and a working electrode 4 modified by enzymes or the like, a reference electrode 5, an opposed electrode 6, and a minute-projection structure electrode 3 comprising many minute projections 16 having surfaces modified by conductive material, placed on the upstream of the electrodes 4-6, are formed. Besides, the sensor has a substrate 13 having the electrodes 3-6 on which a passage 7 is formed. The surfaces of many minute projections 16 are modified by the conductive material. In the case where an obstacle material in a biosample, injected into a thin-layer electrochemical cell or a sensor simultaneously with target material in the biosample, is electrochemically active material, the obstacle material can be reacted on the minute-projection structure electrode 3 and removed by applying electric potential, because the surfaces of the minute projections 16 are conductive.

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